

raise any new issue requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; (c) do not present any additional claims; and (d) place the application in better form for appeal, should an appeal be necessary. Entry of the amendments is thus respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

An Election of Species Requirement was required between the figures. Accordingly, Applicant elected Species I, Fig. 1, 3, 4 and 5 and Species A, Fig. 2, claims 1-4 and 9. However, Applicant retains claims 6-8 as they are dependent from claim 1 and remain generic to claim 1. Thus, claims 6-8 would be allowable for the same reasons claim 1 is allowable.

Furthermore, Applicant also requests consideration of added claim 10 because Applicant asserts a search for claim 10 does not place a serious burden upon the Examiner. In particular, Applicant's claim 10 recites a core which extends from an outside of the tire toward an inside thereof. Conversely, Applicant's claim 1 recites a core which extends from an inside of the tire toward an outside thereof. In fact, as shown in Ueyoko, U.S. Patent No.5,885,387, the Examiner applied a reference which uses a core which extends from both the inside of the tire toward an outside and from the outside of the tire toward the inside. Applicant also notes that the Examiner has also applied previous applied art which discloses a similar feature.

As previously stated, the Examiner believes that the depiction of both embodiments in a single reference is irrelevant. However, by stating that both embodiments are disclosed in a single reference makes it evident that an unnecessary delay and expense to Applicant and duplicate examination by the U.S. Patent and Trademark Office exists because the search for one embodiment overlaps a search for the second embodiment. Applicant thus asserts that a

serious burden on the Examiner to examine both embodiments has not been established. It is respectfully requested that claim 10 be entered and considered by the Examiner.

Claims 1, 2, 4, and 9 are rejected under 35 U.S.C. §112, second paragraph. By this Amendment, Applicant has amended claim 1, and similarly amended claim 10, to clarify that the two bead cores have a rectangular structure in which one or more steel wires are arranged lengthwise and widthwise in radial and widthwise directions of the tire. As disclosed in Applicant's Fig. 1, for example, one or more steel wires are arranged lengthwise (approximately up and down) and widthwise (approximately left to right) in radial (approximately up and down) and widthwise directions of the tires. By arranging the steel wires in this manner, a rectangular structure is created. As such, Applicant asserts that the claims as amended are clear and that the foregoing description clarifies the meaning of the structure of the beadcores. It is respectfully requested that the rejection be withdrawn.

Claims 1, 2, 4 and 9 are rejected under 35 U.S.C. §103(a) over JP 3-243404 (JP '404) in view of Ueyoka, U.S. Patent No. 5,885,387. The rejection is respectfully traversed.

Applicant first asserts that neither JP '404 nor Ueyoka teach, disclose or suggest a pneumatic radial tire with two bead cores arranged adjacent to each other in a widthwise direction of the tire and each of the two bead cores has a rectangular structure such that one or more steel wires are arranged lengthwise and widthwise in radial and widthwise directions of the tire as recited in Applicant's claim 1.

JP '404 discloses two annular bead cores consisting of a main bead core 2 having a polygonal shape (hexagonal shape) at section and subsidiary bead core 3 having a circular shape at section, each of which cores being an assembly of plural steel wires (Abstract and associated figure). As such, neither of JP '404's bead cores has a rectangular shape. Without disclosing a rectangular shape, the structure of the bead cores in JP '404 cannot be arranged adjacent to each other in a widthwise direction and cannot be arranged lengthwise and

widthwise in radial and widthwise directions because to provide such a structure would prevent the creation of the polygonal and circular shapes. The creation of the polygonal and circular shapes requires an arrangement which can not be created by placing steel wires in both a radial and widthwise direction.

Furthermore, by using a polygonal shape for the main bead core 2 and a circular shape for the subsidiary bead core 3, JP '404 suffers the deficiencies of Applicant's related art because the carcass 9 cannot be strongly sandwiched between the main bead core 2 and the subsidiary bead core 3. As shown in the figure of JP '404, a gap exists between the carcass 9 and two ends of the polygonal-shaped main bead core 2. Applicant overcomes this deficiency, and thus provides a rigid structure by having rectangular -shaped bead cores 4i and 4o, for example as shown in Fig. 1, with steel wires arranged lengthwise and widthwise in radial and widthwise directions of the tire. Ueyoka fails to overcome the deficiencies of JP '404 because Ueyoka only uses one bead core (Fig. 1, for example).

As also shown in Figures 9 through 11 of Ueyoka, Ueyoka discloses two bead cores. However, these two bead cores are arranged adjacent to each other in the radial direction (up and down) of the tire. Conversely, Applicant's bead cores are arranged in the widthwise direction (left to right). As such, Ueyoka discloses the opposite of Applicant's claimed invention.

As such, neither JP '404 nor Ueyoka discloses or suggests two bead cores arranged adjacent to each other in a widthwise direction and that each of the two bead cores has a rectangular structure as recited in Applicant's claim 1.

Secondly, and as stated on page 2 of the Office Action, JP '404 fails to teach, disclose or suggest Applicant's claimed invention because JP '404 fails to provide a radial carcass comprised of a rubberized ply of a continuous cord successively repeating round trip in at least one of the two bead cores as a pair between the pair of the bead portions along a

circumference of the bead portion with a roundtrip return portion of the cord existent in both the bead portions as recited in Applicant's claim 1.

The Abstract and Figure of JP '404 only describes the carcass 9 with a typical carcass arrangement containing cords arranged side by side in a circumferential direction at a cord angle of 90° with respect to an equilateral plane of the tire. Applicant thus asserts that it is neither taught nor disclosed in JP '404 to provide a roundtrip return portion. In fact, Applicant asserts there is no teaching, suggestion or motivation in JP '404 to provide a roundtrip return portion as recited in Applicant's claim 1 for the advantages discussed in Applicant's specification.

As such, Applicant asserts there is no teaching, motivation or suggestion to replace the carcass 9 in JP '404 with the carcass 7 in Ueyoka. The problem presented and solved by JP '404 is to improve the durability of the bead section structure (title of JP '404) by using a first and second stiffening layers 12, 13 with carcass 9 and not to provide a carcass structure which controls a pulling-out phenomenon of a carcass ply cord and to sufficiently ensure a strength and rigidity required for a bead portion to provide excellent bead portion durability by providing a round trip return portion located through a side face of the bead cores having the structure as recited in Applicant's claim 1.

In addition, claims 2, 4 and 9 recite additional features of the invention and are also believed to be allowable at least for reasons discussed above with regard to claim 1 and for the additional features recited therein. It is respectfully requested the rejection be withdrawn.

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 2, 4, and 6-10 are respectfully requested.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,



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## APPENDIX

## Changes to Claims:

The following is a marked-up version of the amended claims:

1. (Twice Amended) A pneumatic radial tire comprising a radial carcass extending between a pair of bead portions each including two bead cores therein and reinforcing a pair of sidewall portions and a tread portion, wherein the radial carcass is comprised of a rubberized ply of a continuous cord successively repeating round trip in at least one of the two bead cores as a pair between the pair of the bead portions along a circumference of the bead portion and a roundtrip return portion of the cord is existent in both the bead portions, ~~characterized in that~~ in which the two bead cores in each of the bead portions are arranged adjacent to each other in ~~the~~ a widthwise direction of the tire, and at least one each of the two bead cores has such a rectangular structure that one or more steel wires are arranged lengthwise and widthwise in radial and widthwise directions of the tire, and the roundtrip return portion of the carcass ply cord ~~of the carcass ply has a roundtrip return portion~~ is located through a side face of any one of the two bead cores of the bead core having the above structure so as to extend from an inside of the tire toward an outside thereof ~~in the widthwise direction~~ and cover at least ~~an~~ a radially innermost steel wire arrangement of the respective bead core ~~in the radial direction~~.

10. (Amended) A pneumatic radial tire comprising a radial carcass extending between a pair of bead portions each including two bead cores therein and reinforcing a pair of sidewall portions and a tread portion, wherein the radial carcass is comprised of a rubberized ply of a continuous cord successively repeating round trip in at least one of the two bead cores as a pair between the pair of the bead portions along a circumference of the bead portion and a roundtrip return portion of the cord is existent in both the bead portions, ~~characterized in that~~ in which the two bead cores in each of the bead portions are arranged

adjacent to each other in ~~the~~a widthwise direction of the tire, and ~~at least each~~ one of the two bead cores has such a rectangular structure that one or more steel wires are arranged lengthwise and widthwise in radial and widthwise directions of the tire, and the roundtrip return portion of the carcass ply cord ~~of the carcass ply has a roundtrip return portion~~ is located through a side face of any one of the two bead cores ~~the bead core having the above~~ structure so as to extend from an outside of the tire toward an inside thereof ~~in the widthwise~~ direction and cover at least ~~an~~ a radially innermost steel wire arrangement of the respective bead core ~~in the radial direction~~.